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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/506,910	07/11/2005	Alexandre Cotarmanach	F40.12-0028	6776
27367 7590 04/12/2010 WESTMAN CHAMPLIN & KELLY, P.A. SUITE 1400 900 SECOND AVENUE SOUTH MINNEAPOLIS, MN 55402				
EXAMINER				
CHOKSHI, PINKAL R				
ART UNIT		PAPER NUMBER		
2425				
MAIL DATE		DELIVERY MODE		
04/12/2010		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/506,910

**Applicant(s)**

COTARMANACH, ALEXANDRE

**Examiner**

Pinkal R. Chokshi

**Art Unit**

2425

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 February 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-15 and 17-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 and 17-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB-08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Response to Arguments***

1. Applicant's arguments filed 02/15/2010 have been fully considered but they are not persuasive.

In response to applicant's argument that there is no teaching, suggestion, or motivation to combine the references, the examiner recognizes that obviousness may be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988), *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992), and *KSR International Co. v. Teleflex, Inc.*, 550 U.S. 398, 82 USPQ2d 1385 (2007). In this case, Applicant asserts that the combination of references does not teach the limitation "each of said stream or streams being made of access units". Examiner respectfully disagrees. First, Access Unit is a broad term and is not defined in the claim. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. Pierre discloses (col.5, line 42-col.6, line 10) that the data stream transmitted to the receiver includes data objects (access units), where data objects can be application code and data, A/V clips, control signals, triggers, etc, as represented in Fig. 2. Based on the broadest reasonable interpretation, data objects of Pierre reads on the access unit since access unit is not defined in the claim. Therefore,

the combination of references meets all the limitations of the claim 1 as mentioned above and it renders the claim of obviousness.

Furthermore, Applicant alleges that the office action has not provided a suggestion or motivation to combine the references Pierre and Putzolu. Examiner respectfully disagrees. The motivation to combine Pierre and Putzolu references came from the secondary reference Putzolu, where the motivation would be to describe dependencies among the data packets so the arrangement of a media presentation to be varied in response to information that becomes available as the presentation progresses. The same motivation is also provided on the page 10 of the previous office action. Therefore, it rebuts the Applicant's argument.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., **stream unit does not contain a sound or a picture** and **stream units are not transmitted cyclically**) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Furthermore, Applicant alleges that Furukawa does not disclose a pointer that points to another stream unit. Examiner respectfully disagrees. Furukawa discloses (¶0063) that the MPEG transport stream transmitted to an apparatus includes field for urgent pointer as represented in Fig. 7. Also, Referring to the standard defining the header package 'TCP' (RFC793) from the same source (<http://www.faqs.org/rfcs/rfc793.html>), the definition of the "urgent pointer" is

Urgent Pointer: This field communicates the current value of the urgent pointer as a positive offset from the sequence number in this segment. *The urgent pointer points to the sequence number of the octet following the urgent data.* This field is only be interpreted in segments with the URG control bit set.

Based on the above definition, one skilled in the art can conclude that the urgent pointer points to another data following the urgent data in the stream. Therefore, it rebuts the Applicant's argument.

With regard to the dependent claims, the respective rejections are maintained as Applicant has only argued that the secondary references do not cure the deficiencies of Pierre, nevertheless it is the Examiner's contention that Okura does not contain any deficiencies.

With regard to the newly added claim 23, see the new rejection below.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. **Claim 23** is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

- Regarding above claim, applicant discloses a dependency unit and said dependency unit being an access unit. However, application fails to provide adequate support by the first paragraph of 35 U.S.C. 112 for above mentioned limitation in the detailed description and/or in the drawings. Applicant to provide support for this limitation.

***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. **Claim 23** is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- Claim 22 recites the limitation "the terminal" in pg.7, line 3. There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. **Claims 18-20** are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 7,000,245 to Pierre (hereafter referenced as Pierre) in view of US Patent 6,205,140 to Putzolu (hereafter referenced as Putzolu) and US PG Pub 2002/0071434 to Furukawa (hereafter referenced as Furukawa).

Regarding **claim 18**, "a server for data designed to be transmitted to at least one terminal" reads on the data stream that is broadcast from a broadcast station to a receiving station (abstract and col.2, lines 61-63) disclosed by Pierre and represented in Fig. 1.

As to "in the form of at least one data stream made of access units transmitted independently from each other" Pierre discloses (col.5, lines 42-45) that the data stream transmitted to receiver comprises data objects as represented in Fig. 2.

As to "wherein at least some of said access units include at least one pointer that points to at least one other access unit of said stream or of another stream that may have been received previously in the terminal, called a required previous unit" Pierre discloses (col.6, lines 30-49) that the data objects in a stream contain references (pointers) to data objects in other stream, where some of the data object of the other stream is previously received and stored in the receiver as represented in Fig. 3.

Pierre meets all the limitations of the claim except "wherein said pointer is a dependency pointer, the dependency pointer being included in a dependency descriptor of said access unit, said dependency descriptor describing said

dependency pointer." However, Putzolu discloses (col.3, lines 33-35) that the packet includes header, stream descriptor and payload. As represented in Fig. 2 (element 150), dependency pointer included in a packet holds a certain bits length (col.5, lines 61-62). Putzolu further discloses (col.3, lines 64-65) that the stream descriptor of a packet includes dependency information as represented in Fig. 2. Putzolu also discloses (col.5, lines 1-4, 28-33, 38-44) that the dependency information included in the descriptor defines a list of media streams needed for delivering the given media stream. Therefore, it would have been obvious to one of the ordinary skills in the art at the time of the invention to modify Pierre's system by using descriptor of access unit for pointer as taught by Putzolu in order to describe dependencies among the data packets so the arrangement of a media presentation to be varied in response to information that becomes available as the presentation progresses (col.1, lines 55-60).

Combination of Pierre and Putzolu meets all the limitations of the claim except "the dependency pointer being distinct from any sequence number said access unit may have." However, Furukawa discloses (§0063) that the MPEG transport stream transmitted to an apparatus includes different fields for a sequence number and a pointer as represented in Fig. 7. Therefore, it would have been obvious to one of the ordinary skills in the art at the time of the invention to modify Pierre and Putzolu's systems by using pointer and sequence number as distinct fields as taught by Furukawa in order to use both fields for separate stream functions.



Regarding **claim 19**, "a terminal that can receive at least one data stream" reads on the data stream that is broadcast to a receiving station (abstract and col.2, lines 61-63) disclosed by Pierre and represented in Fig. 1.

As to "the data stream is made of steam units transmitted independently one from the other" Pierre discloses (col.5, lines 42-45) that the data stream transmitted to receiver comprises data objects as represented in Fig. 2.

As to "wherein at least some of said access units include at least one pointer that points to at least one other access unit of said stream or of another stream that may have been received previously in the terminal, called a required previous unit" Pierre discloses (col.6, lines 30-49) that the data objects in a stream contain references (pointers) to data objects in other stream, where some of the data object of the other stream is previously received and stored in the receiver as represented in Fig. 3.

Pierre meets all the limitations of the claim except "wherein said pointer is a dependency pointer, the dependency pointer being included in a dependency descriptor of said access unit, said dependency descriptor describing said dependency pointer." However, Putzolu discloses (col.3, lines 33-35) that the packet includes header, stream descriptor and payload. As represented in Fig. 2 (element 150), dependency pointer included in a packet holds a certain bits length (col.5, lines 61-62). Putzolu further discloses (col.3, lines 64-65) that the stream descriptor of a packet includes dependency information as represented in

Fig. 2. Putzolu also discloses (col.5, lines 1-4, 28-33, 38-44) that the dependency information included in the descriptor defines a list of media streams needed for delivering the given media stream. Therefore, it would have been obvious to one of the ordinary skills in the art at the time of the invention to modify Pierre's system by using descriptor of access unit for pointer as taught by Putzolu in order to describe dependencies among the data packets so the arrangement of a media presentation to be varied in response to information that becomes available as the presentation progresses (col.1, lines 55-60).

Combination of Pierre and Putzolu meets all the limitations of the claim except "the dependency pointer being distinct from any sequence number said access unit may have." However, Furukawa discloses (§10063) that the MPEG transport stream transmitted to an apparatus includes different fields for a sequence number and a pointer as represented in Fig. 7. Therefore, it would have been obvious to one of the ordinary skills in the art at the time of the invention to modify Pierre and Putzolu's systems by using pointer and sequence number as distinct fields as taught by Furukawa in order to use both fields for separate stream functions.

Regarding **claim 20**, "a reception procedure comprising: receiving at least one data stream" reads on the data stream that is broadcast to a receiving station (abstract and col.2, lines 61-63) disclosed by Pierre and represented in Fig. 1.

As to "at least one stream is made of steam units transmitted independently one from the other" Pierre discloses (col.5, lines 42-45) that the data stream transmitted to receiver comprises data objects as represented in Fig. 2.

As to "wherein at least some of said access units include at least one pointer that points to at least one other access unit of said stream or of another stream that may have been received previously in a terminal, called a required previous unit" Pierre discloses (col.6, lines 30-49) that the data objects in a stream contain references (pointers) to data objects in other stream, where some of the data object of the other stream is previously received and stored in the receiver as represented in Fig. 3.

Pierre meets all the limitations of the claim except "wherein said pointer is a dependency pointer, the dependency pointer being included in a dependency descriptor of said access unit, said dependency descriptor describing said dependency pointer." However, Putzolu discloses (col.3, lines 33-35) that the packet includes header, stream descriptor and payload. As represented in Fig. 2 (element 150), dependency pointer included in a packet holds a certain bits length (col.5, lines 61-62). Putzolu further discloses (col.3, lines 64-65) that the stream descriptor of a packet includes dependency information as represented in Fig. 2. Putzolu also discloses (col.5, lines 1-4, 28-33, 38-44) that the dependency information included in the descriptor defines a list of media streams needed for delivering the given media stream. Therefore, it would have been

obvious to one of the ordinary skills in the art at the time of the invention to modify Pierre's system by using descriptor of access unit for pointer as taught by Putzolu in order to describe dependencies among the data packets so the arrangement of a media presentation to be varied in response to information that becomes available as the presentation progresses (col.1, lines 55-60).

Combination of Pierre and Putzolu meets all the limitations of the claim except "the dependency pointer being distinct from any sequence number said access unit may have." However, Furukawa discloses (§10063) that the MPEG transport stream transmitted to an apparatus includes different fields for a sequence number and a pointer as represented in Fig. 7. Therefore, it would have been obvious to one of the ordinary skills in the art at the time of the invention to modify Pierre and Putzolu's systems by using pointer and sequence number as distinct fields as taught by Furukawa in order to use both fields for separate stream functions.

8. **Claims 1-15, 17, 21, and 22** are rejected under 35 U.S.C. 103(a) as being unpatentable over Pierre in view of Putzolu and Furukawa as applied to claims 18-20 above, and further in view of US PG Pub 2001/0027468 to Okura (hereafter referenced as Okura).

Regarding **claim 1**, "transmission procedure comprising: generating at least one data stream for transmission to at least one terminal and transmitting the at least one data stream to the at least one terminal" reads on the data

stream that is broadcast to a receiving station (abstract and col.2, lines 61-63) disclosed by Pierre and represented in Fig. 1.

As to "each of said stream or streams being made of access units" Pierre discloses (col.5, lines 42-45) that the data stream transmitted to receiver comprises data objects as represented in Fig. 2.

As to "wherein at least some of said access units include at least one pointer that points to at least one other access unit of said stream or of another stream that may have been received previously in the terminal, called a required previous unit" Pierre discloses (col.6, lines 30-49) that the data objects in a stream contain references (pointers) to data objects in other stream, where some of the data object of the other stream is previously received and stored in the receiver as represented in Fig. 3.

Pierre meets all the limitations of the claim except "wherein said pointer is a dependency pointer, the dependency pointer being included in a dependency descriptor of said access unit, said dependency descriptor describing said dependency pointer." However, Putzolu discloses (col.3, lines 33-35) that the packet includes header, stream descriptor and payload. As represented in Fig. 2 (element 150), dependency pointer included in a packet holds a certain bits length (col.5, lines 61-62). Putzolu further discloses (col.3, lines 64-65) that the stream descriptor of a packet includes dependency information as represented in Fig. 2. Putzolu also discloses (col.5, lines 1-4, 28-33, 38-44) that the dependency information included in the descriptor defines a list of media streams

needed for delivering the given media stream. Therefore, it would have been obvious to one of the ordinary skills in the art at the time of the invention to modify Pierre's system by using descriptor of access unit for pointer as taught by Putzolu in order to describe dependencies among the data packets so the arrangement of a media presentation to be varied in response to information that becomes available as the presentation progresses (col.1, lines 55-60).

Combination of Pierre and Putzolu meets all the limitations of the claim except "the dependency pointer being distinct from any sequence number said access unit may have." However, Furukawa discloses (§0063) that the MPEG transport stream transmitted to an apparatus includes different fields for a sequence number and a pointer as represented in Fig. 7. Therefore, it would have been obvious to one of the ordinary skills in the art at the time of the invention to modify Pierre and Putzolu's systems by using pointer and sequence number as distinct fields as taught by Furukawa in order to use both fields for separate stream functions.

Combination of Pierre, Putzolu, and Furukawa meets all the limitations of the claim except "so that processing of said access unit is not performed in said terminal if the required previous unit or units have not been received." However, Okura discloses (§0024) that control unit, based on the scene description information, determines whether to process the stream. Okura further discloses (§0129) that the system determines if the data is missing, and then it reads data from storage portion. Okura further discloses (§0010, §0029, and §0113) that

program file is not allowed to have data missing and it must be fully received by receiving side. If the check unit determines that sequence numbers are not in order then it means a packet is missing and the process is ended as represented in Fig. 10. Therefore, it would have been obvious to one of the ordinary skills in the art at the time of the invention to modify Pierre, Putzolu, and Furukawa's systems by not processing the access unit when there is an abnormality as taught by Okura in order to recover lost data and prevent it from being missing (§0013, §0020).

Regarding **claim 2**, "transmission procedure wherein the procedure includes the transmission of at least two data streams that are transmitted independently" Pierre discloses (col.6, lines 50-52) that the programs are transmitted to the receiving station on a different channel as represented in Fig. 3.

As to "one access unit of a first stream pointing to at least one required previous unit of at least a second stream, in which said access unit of the first stream includes enrichment data of the data contained in the second stream(s)" Pierre discloses (col.6, lines 30-49) that the data object in one stream contain references to data objects in other streams as represented in Fig. 3. Pierre further discloses (col.6, 30-49; col.7, lines 53-56) that the stream includes identifying information that contain references to data objects in other access units.

Regarding **claim 3**, "transmission procedure wherein said data streams correspond to different hierarchical levels of hierarchical encoding, the processing of a access unit of a given hierarchical level is only performed if the access units of the corresponding lower hierarchical levels have been received" Putzolu discloses (col.5, lines 4-8, 40-44) that the media streams have a value where it's matched with a layer of an hierarchically encoded video stream which requires based layer media stream in order to be successfully delivered. In addition, same motivation is used as rejection to claim 1.

Regarding **claim 4**, "transmission procedure wherein this access unit points to at least one previous unit defining a sequence of required previous units" Putzolu discloses (col.4, lines 45-48; col.10, lines 42-46) that the packet includes the sequence numbers indicating previous data packets. In addition, same motivation is used as rejection to claim 1.

Regarding **claim 5**, "transmission procedure wherein at least one of said pointers allows recovering at least one required previous unit that includes the data allowing decoding and/or decrypting of the considered access unit" Pierre discloses (col.5, lines 15-19) that the data streams transmitted to receiver is decoded by the receiver.



Regarding **claim 6**, "transmission procedure wherein said required previous unit or units include data that allows a terminal to decide whether the data of a considered access unit must be decoded and/or decrypted, and then displayed after decoding" Pierre discloses (col.6, lines 15-20; col.7, lines 47-50) that the receiving station determines the properties associated with the stream and generate signals to display on television.

Regarding **claim 7**, "transmission procedure wherein at least one of said pointers point to data that can be known by said terminal, so that the latter can decide on its capacity or incapacity to process the corresponding access unit" Okura discloses (¶0026) that the transmission system that transmits control information pointing the object data and scene information with each other, where process portion unit determines whether to use the default scene information to modify corresponding stream information for output. In addition, same motivation is used as rejection to claim 1.

Regarding **claim 8**, "transmission procedure wherein at least one of said access units includes at least one pointer pointing to at least one access unit of said stream or another stream that may be subsequently received" Pierre discloses (col.9, lines 7-36) that the stream that points to another stream that references to live content are received at the later time when it's being played back as represented in Fig. 6.

Regarding **claim 9**, "transmission procedure wherein said access unit or units that can be subsequently received posses a marker that allows linking with said pointer(s)" Okura discloses (§0164) that the data packet in transmission system has a time stamp information and based on this information, a correspondence between video, audio and other data are uniquely determined. In addition, same motivation is used as rejection to claim 1.

Regarding **claim 10**, "transmission procedure wherein the pointers of at least two similar access units transmitted at distinct times point to the same access unit that can be subsequently received" Okura discloses (§0008) that the multiple streams are transmitted via different routes and protocols to receiving device. In addition, same motivation is used as rejection to claim 1.

Regarding **claim 11**, "transmission procedure wherein the procedure implements an indicator that specifies the role of the pointer(s) from among two of the roles belonging to the groups that include: designation of at least one previous access unit that must be decoded to allow taking into account the considered access unit" Okura discloses (§0151) that the checking portion uses the data as well as previous data associated with the stream from the storage portions to generate this data to decoder which decodes it and then displayed on device.

As to "designation of at least one previous access unit that includes the data necessary for decoding and/or decrypting the considered access unit, and/or of a reference to a status of the protection system" Okura discloses (§0123) that the multiplexer outputs all streams to decoder which decodes the packet.

As to "designation of at least one subsequent access unit" Okura discloses (§0125) that the packet header (stream) has a sequence number and each sequence number has a successive value for packet. Okura further discloses (§0029) that when the scene does not have a subsequent sequence number, system determines that there is an abnormality. In addition, same motivation is used as rejection to claim 1.

Regarding **claim 12**, "transmission procedure wherein at least some of said access units include a dependency descriptor, which defines said role" Okura discloses (§0006) that the scene description and streams are associated with each other by an object descriptor to control information. In addition, same motivation is used as rejection to claim 1.

Regarding **claim 13**, "transmission procedure wherein at least some of said access units include a dependency marker that allows its identification as a required previous unit" Pierre discloses (col.5, lines 42-60; col.7, lines 34-37) that

the information provided in the stream identifies references to other stream that can be identified the receiving station.

Regarding **claim 14**, "transmission procedure wherein at least some of said access units include an identification marker of said access unit in said stream" Pierre discloses (col.6, lines 36-38) that the stream includes ID marker as represented in Fig. 3 (element 31).

Regarding **claim 15**, "transmission procedure wherein the procedure is implemented at the synchronization level so that no previous processing of a received access unit is necessary" Okura discloses (§0156) that the data stream and the related data stream are synchronized with each other based on the time stamp. In addition, same motivation is used as rejection to claim 1.

Regarding **claim 17**, "a method comprising: producing a stream of data and transmitting the stream to the at least one terminal" reads on the data stream that is broadcast to a receiving station (abstract and col.2, lines 61-63) disclosed by Pierre and represented in Fig. 1.

As to "wherein the stream is made of steam units transmitted independently one from the other" Pierre discloses (col.5, lines 42-45) that the data stream transmitted to receiver comprises data objects as represented in Fig. 2.

As to "wherein at least some of said access units include at least one pointer that points to at least one other access unit of said stream or of another stream that may have been received previously in the terminal, called a required previous unit" Pierre discloses (col.6, lines 30-49) that the data objects in a stream contain references (pointers) to data objects in other stream, where some of the data object of the other stream is previously received and stored in the receiver as represented in Fig. 3.

Pierre meets all the limitations of the claim except "wherein said pointer is a dependency pointer, the dependency pointer being included in a dependency descriptor of said access unit, said dependency descriptor describing said dependency pointer." However, Putzolu discloses (col.3, lines 33-35) that the packet includes header, stream descriptor and payload. As represented in Fig. 2 (element 150), dependency pointer included in a packet holds a certain bits length (col.5, lines 61-62). Putzolu further discloses (col.3, lines 64-65) that the stream descriptor of a packet includes dependency information as represented in Fig. 2. Putzolu also discloses (col.5, lines 1-4, 28-33, 38-44) that the dependency information included in the descriptor defines a list of media streams needed for delivering the given media stream. Therefore, it would have been obvious to one of the ordinary skills in the art at the time of the invention to modify Pierre's system by using descriptor of access unit for pointer as taught by Putzolu in order to describe dependencies among the data packets so the

arrangement of a media presentation to be varied in response to information that becomes available as the presentation progresses (col.1, lines 55-60).

Combination of Pierre and Putzolu meets all the limitations of the claim except "the dependency pointer being distinct from any sequence number said access unit may have." However, Furukawa discloses (§0063) that the MPEG transport stream transmitted to an apparatus includes different fields for a sequence number and a pointer as represented in Fig. 7. Therefore, it would have been obvious to one of the ordinary skills in the art at the time of the invention to modify Pierre and Putzolu's systems by using pointer and sequence number as distinct fields as taught by Furukawa in order to use both fields for separate stream functions.

Combination of Pierre, Putzolu, and Furukawa meets all the limitations of the claim except "so that processing of said access unit is not performed in said terminal if the required previous unit or units have not been received." However, Okura discloses (§0024) that control unit, based on the scene description information, determines whether to process the stream. Okura further discloses (§0129) that the system determines if the data is missing, and then it reads data from storage portion. Okura further discloses (§0010, §0029, and §0113) that program file is not allowed to have data missing and it must be fully received by receiving side. If the check unit determines that sequence numbers are not in order then it means a packet is missing and the process is ended as represented in Fig. 10. Therefore, it would have been obvious to one of the ordinary skills in

the art at the time of the invention to modify Pierre, Putzolu, and Furukawa's systems by not processing the access unit when there is an abnormality as taught by Okura in order to recover lost data and prevent it from being missing (§§0013, §§0020).

Regarding **claim 21**, "reception procedure wherein at least one of said pointers points to at least one access unit of said stream or another stream that may have been received previously in a terminal, called required previous unit" Okura discloses (§§0125) that the packet header (stream) has a sequence number and each sequence number has a successive value for packet. Okura further discloses (§§0029) that when the scene does not have a successive sequence number, system determines that there is an abnormality.

As to "it includes the following stages: analysing said pointer(s) of a access unit and processing said access unit if the required previous unit or units are received" Okura discloses (§§0023) that the control system analyzes and resolves the error which controls the process portion to scene information to resolve the error and process the streams. In addition, same motivation is used as rejection to claim 20.

Regarding **claim 22**, "the transmission procedure comprising a step of using said transmission procedure in one of the applications belonging to the group consisting of: systematic broadcasting of a message before accessing a

program selected by the user; conditional access at a specific quality level and/or at a specific option of a program and interactive television" Pierre discloses (col.1, lines 13-16) that the method is used in an interactive television system.

9. **Claim 23** is rejected under 35 U.S.C. 103(a) as being unpatentable over Pierre in view of Putzolu and Okura.

Regarding **claim 23**, "a processing method of at least one audio visual data stream" reads on the data stream that is broadcast to a receiving station (abstract and col.2, lines 61-63) disclosed by Pierre and represented in Fig. 1.

As to "each of said stream or streams being made of stream units" Pierre discloses (col.5, lines 42-45) that the data stream transmitted to receiver comprises data objects as represented in Fig. 2.

As to "wherein said method comprises the steps of: receiving said stream or streams, wherein at least some of said stream units include at least one pointer which designates at least one other stream unit of said stream or of another stream that may have been received previously in the terminal, called a dependency unit, said dependency unit being an access unit" Pierre discloses (col.6, lines 30-49) that the data objects in a stream contain references (pointers) to data objects in other stream, where some of the data object of the other stream is previously received and stored in the receiver as represented in Fig. 3.

Pierre meets all the limitations of the claim except "dependency unit being an access unit." However, Putzolu discloses (col.3, lines 33-35) that the packet



includes header, stream descriptor and payload. As represented in Fig. 2 (element 150), dependency pointer included in a packet holds a certain bits length (col.5, lines 61-62). Putzolu further discloses (col.3, lines 64-65) that the stream descriptor of a packet includes dependency information as represented in Fig. 2. Putzolu also discloses (col.5, lines 1-4, 28-33, 38-44) that the dependency information included in the descriptor defines a list of media streams needed for delivering the given media stream. Therefore, it would have been obvious to one of the ordinary skills in the art at the time of the invention to modify Pierre's system by using descriptor of access unit for pointer as taught by Putzolu in order to describe dependencies among the data packets so the arrangement of a media presentation to be varied in response to information that becomes available as the presentation progresses (col.1, lines 55-60).

Combination of Pierre and Putzolu meets all the limitations of the claim except "processing said stream or streams unless said at least one dependency unit has not been received." However, Okura discloses (§¶0024) that control unit, based on the scene description information, determines whether to process the stream. Okura further discloses (§¶0129) that the system determines if the data is missing, and then it reads data from storage portion. Okura further discloses (§¶0010, §¶0029, and §¶0113) that program file is not allowed to have data missing and it must be fully received by receiving side. If the check unit determines that sequence numbers are not in order then it means a packet is missing and the process is ended as represented in Fig. 10. Therefore, it would have been

obvious to one of the ordinary skills in the art at the time of the invention to modify Pierre, Putzolu, and Furukawa's systems by not processing the access unit when there is an abnormality as taught by Okura in order to recover lost data and prevent it from being missing (§0013, §0020).

### ***Conclusion***

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pinkal R. Chokshi whose telephone number is (571) 270-3317. The examiner can normally be reached on Monday-Friday 8 - 5 pm (Alt. Monday off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Pendleton can be reached on 571-272-7527. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Pinkal R. Chokshi/  
Examiner, Art Unit 2425

/Brian T. Pendleton/  
Supervisory Patent Examiner, Art Unit 2425/